

# **Wilcox Oil Company Superfund Site**

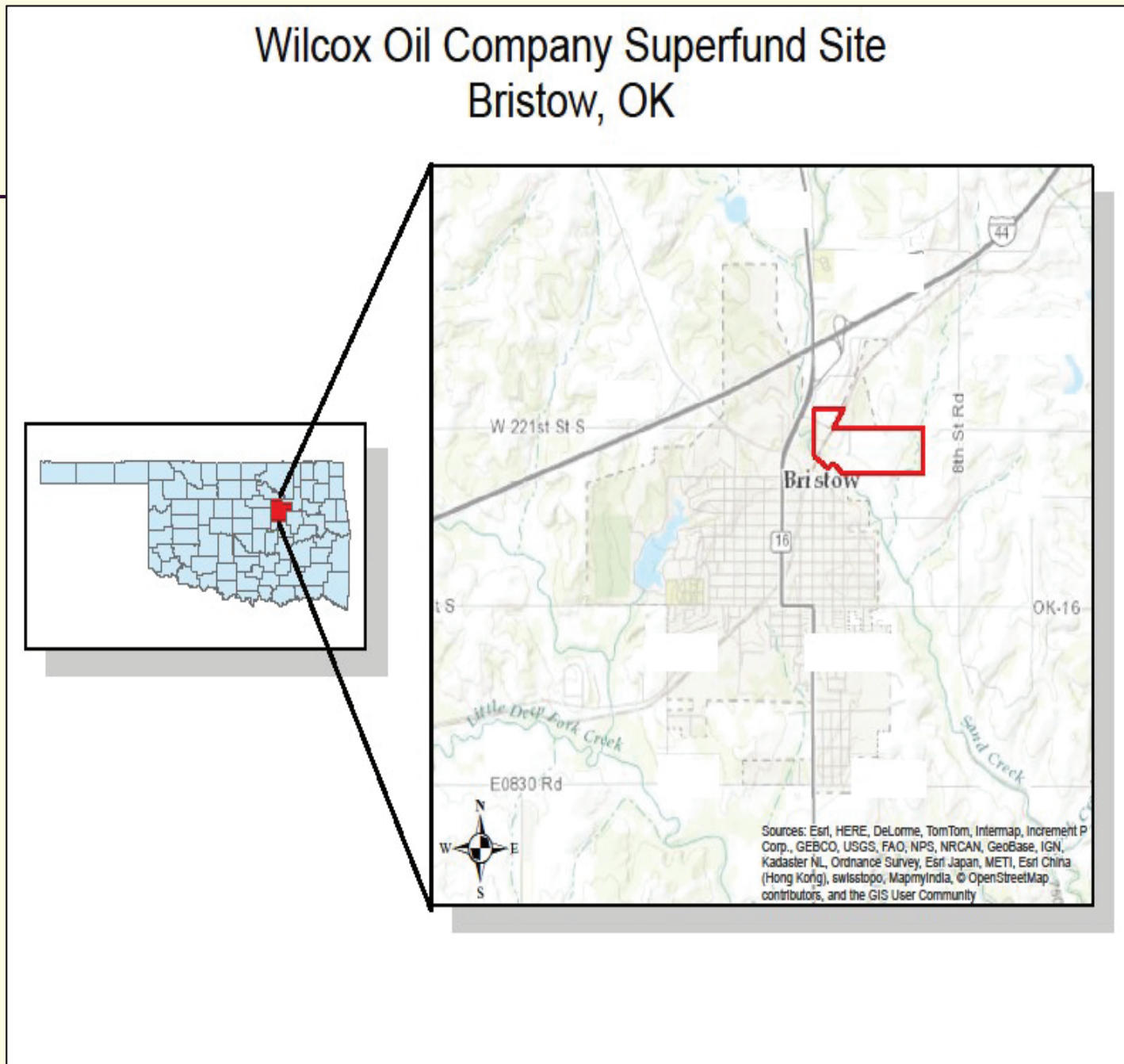
**Remedial Investigation Open House  
July 21, 2016  
DRAFT**



9957164

# Site Location

The Site is situated NE of Bristow, creek County, Oklahoma



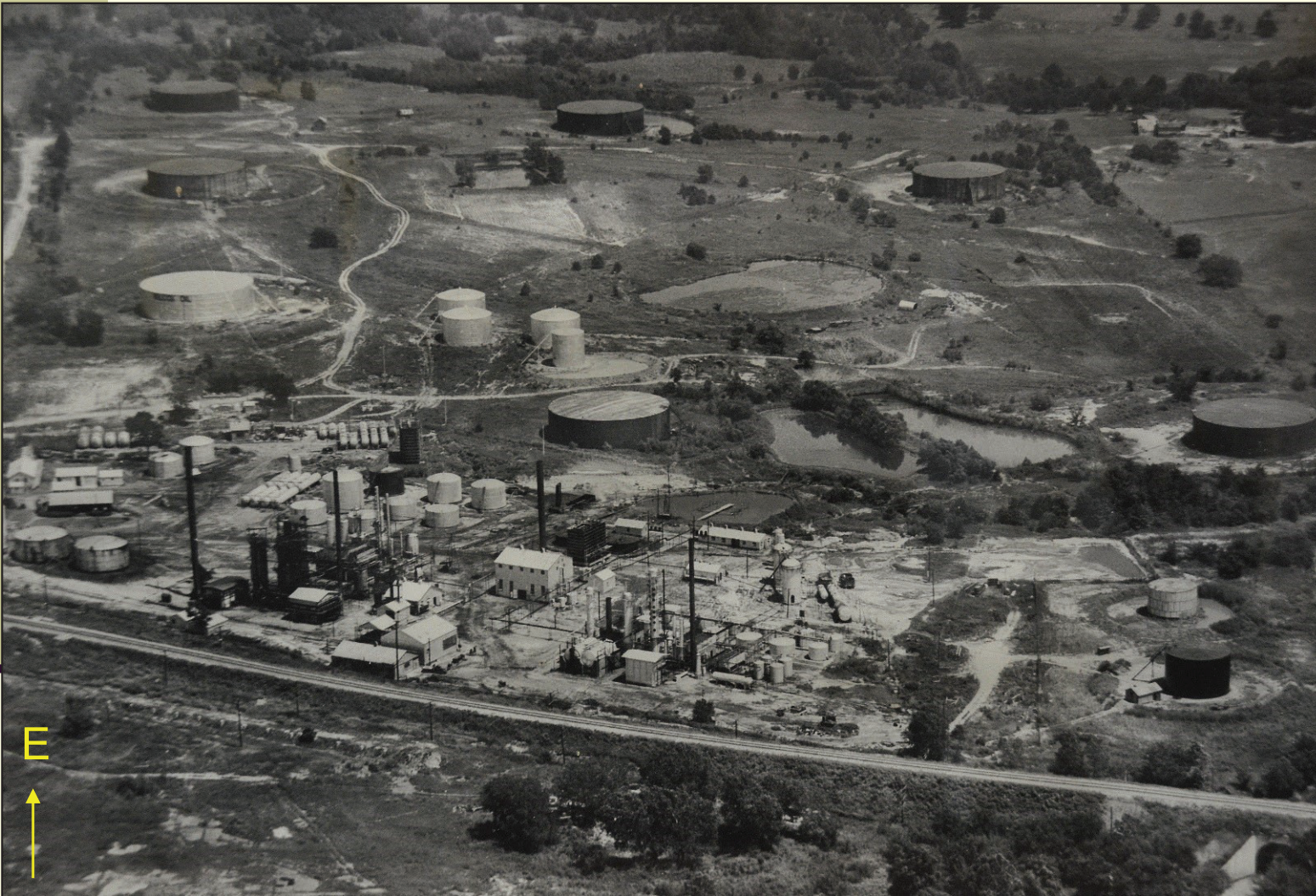


# Site Background

Operation:  
Oil Refinery

Activity Period:  
1915 through 1963

Size:  
about 140 to 150  
acres



1950s Aerial Photograph



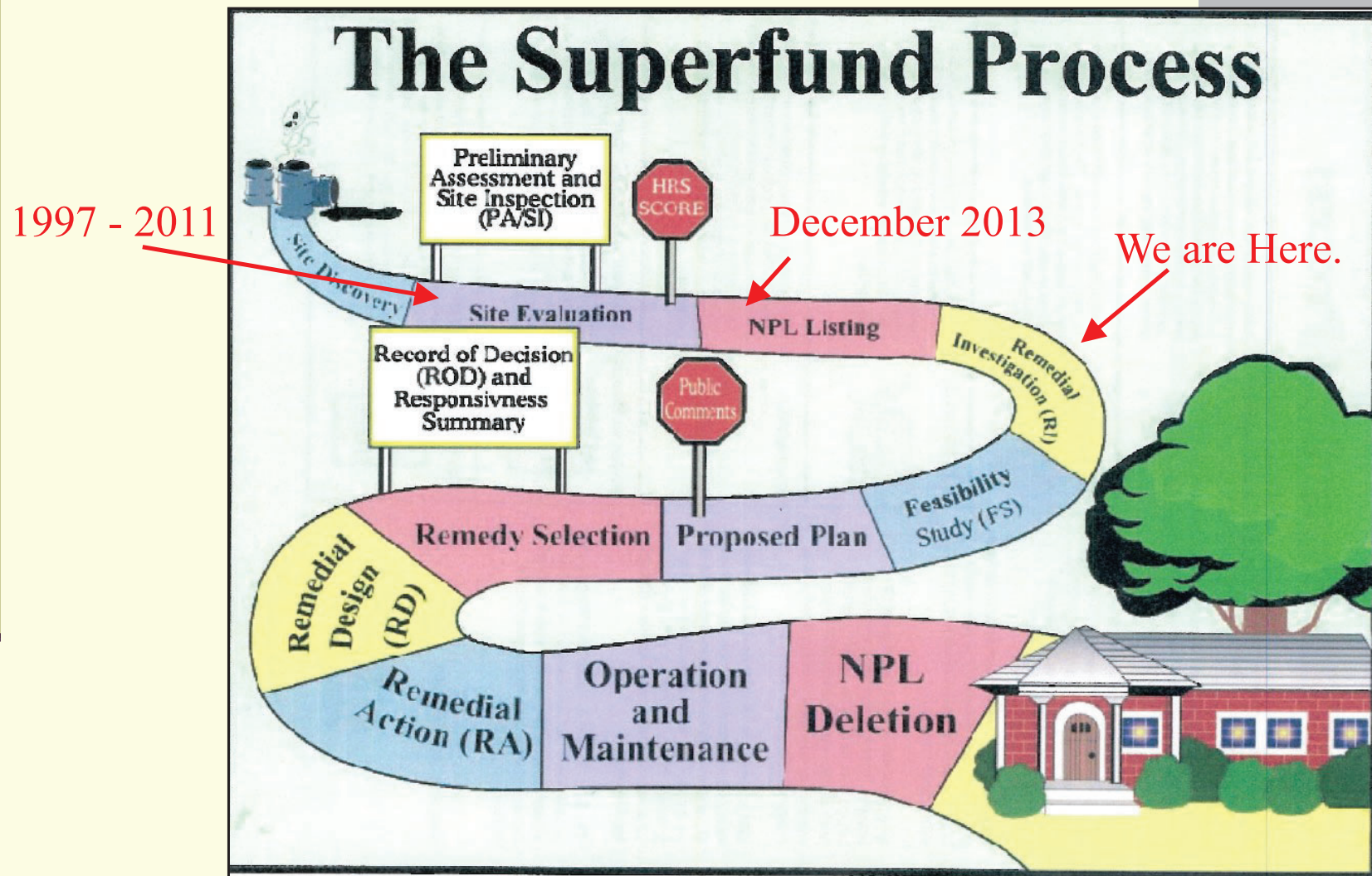
# Site Discovery

- ODEQ Inventory Review
- Site Investigations
  - Preliminary Assessment (PA)
  - Site Inspection (SI)
  - Expanded Site Inspection (ESI)
- Soil data indicated that high concentrations of organics and metals are present.
- National Priorities List
  - Proposed: May 24, 2013
  - Listed: December 12, 2013





# Superfund Process



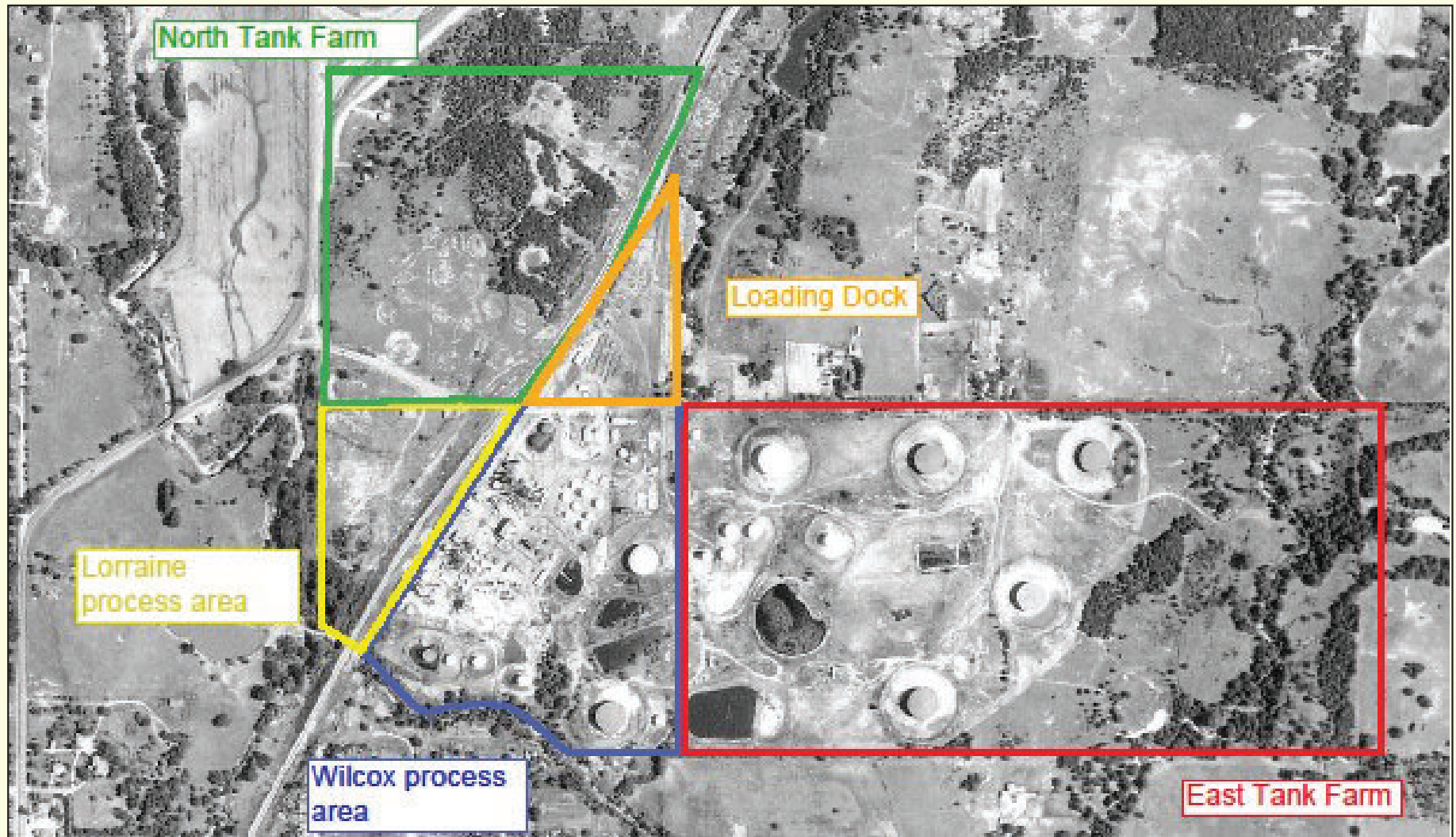
# Remedial Process

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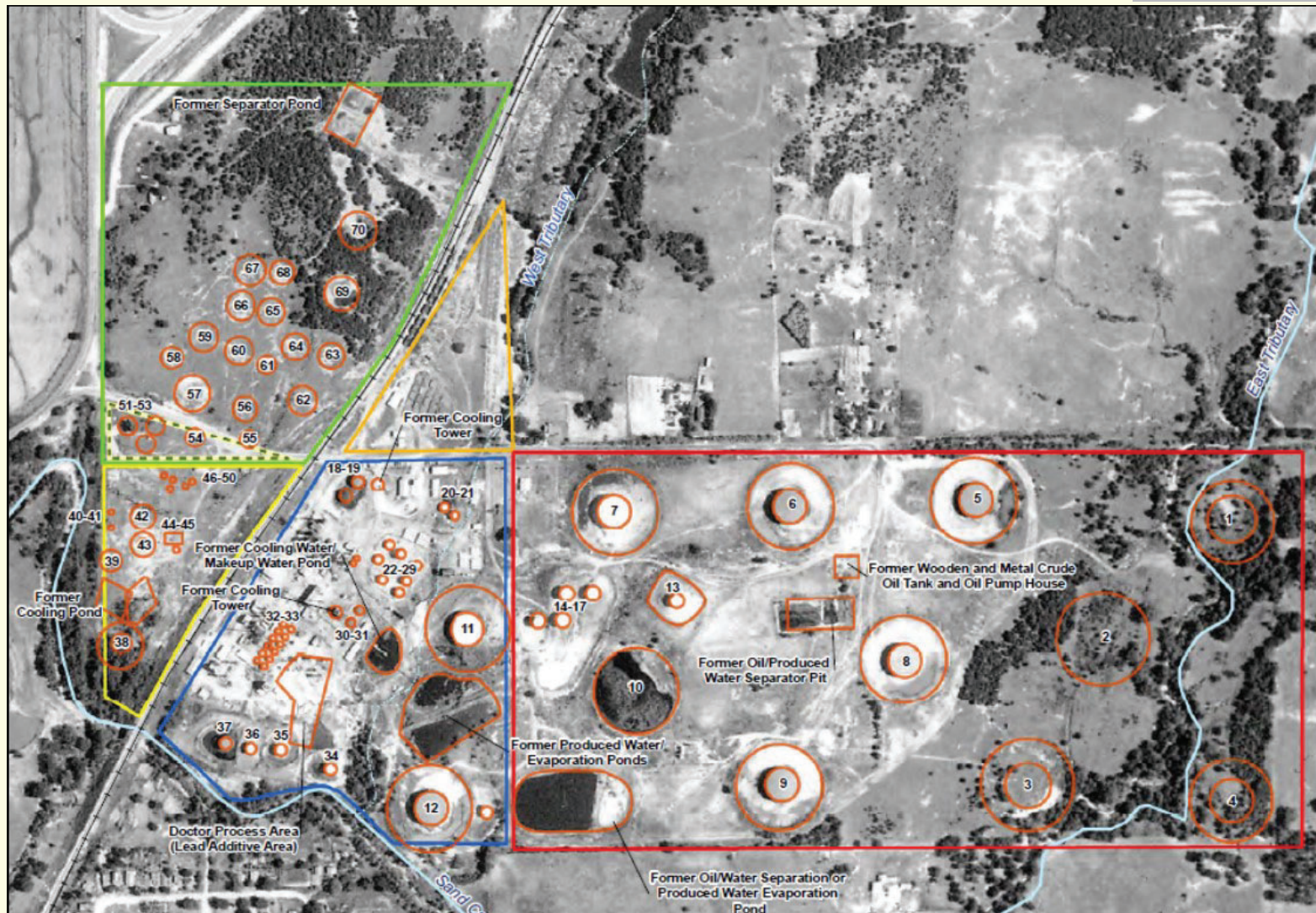
- Remedial Investigation collects data to:
  - Determine Site conditions
  - Determine nature of wastes
  - Evaluate risk from the Site to human health and environment
  
- Feasibility Study (FS) develops, screens, and evaluates different cleanup options



# Site Remedial Investigation (RI)



# Site Remedial Investigation (RI)





# Activities Completed

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## **Potentially Responsible Party Search**

- No offer to perform the work
- July 2015

## **Sampling/Fencing**

- Residential: May/June 2015
- Well: Semi-Annual beginning 2015
- Fencing: July 2015

## **Phase 1**

- Geophysics: September 2015
- Direct Sensing: December 2015

# RI Field Work

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## Phase 1

- Develop an understanding of
  - Site geology
  - Site Operation Features
  - Waste Locations

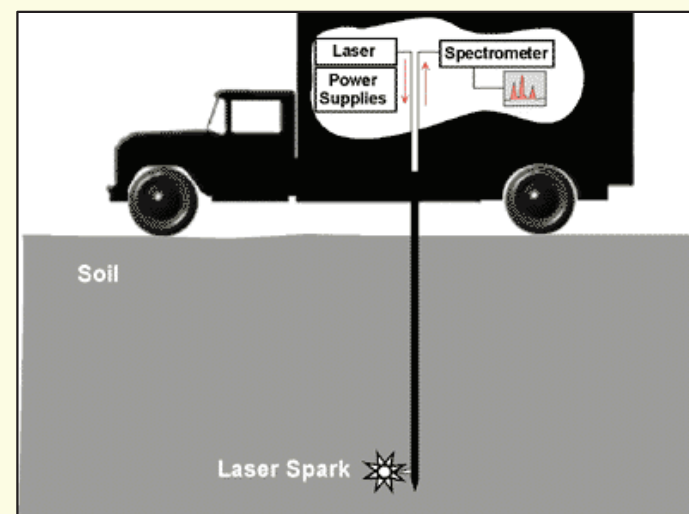
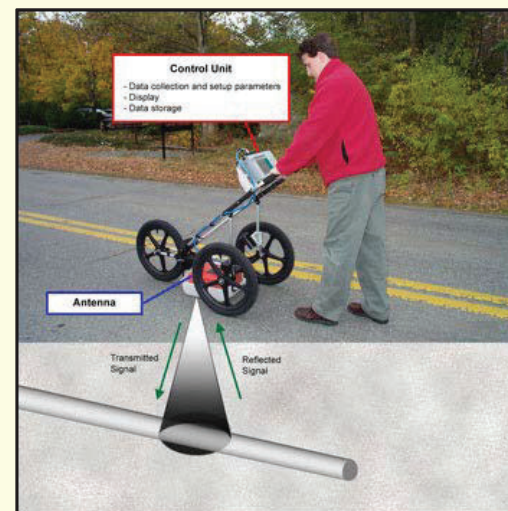
## Phase 2

- Define the
  - Site Risks
  - Nature and Extent of Contamination

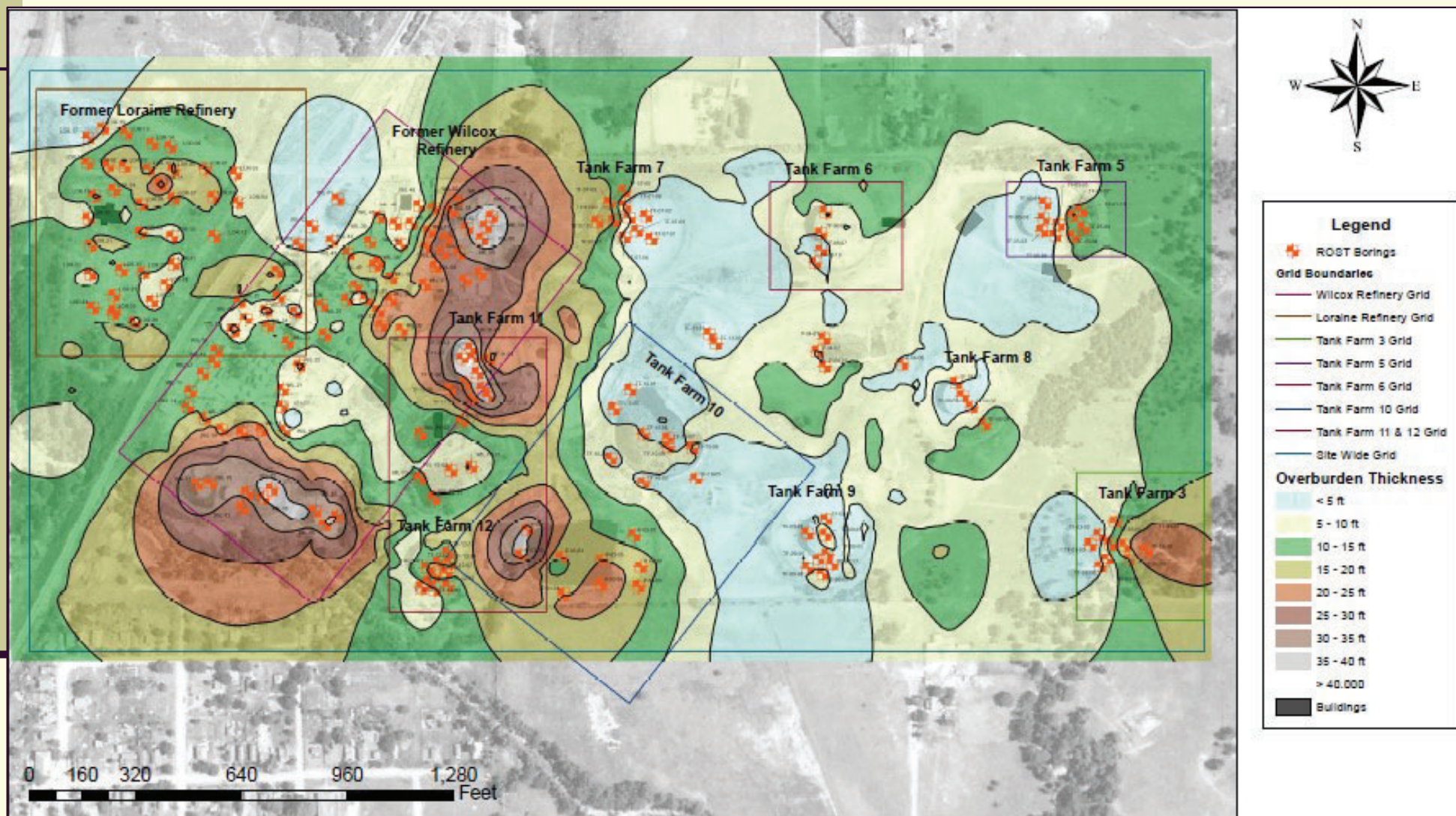


# RI Field Work – Phase 1

- Geophysical Survey
  - Ground Penetrating Radar
  - Electromagnetic Survey
  - Trenching
  
- Soil and Contaminant Survey
  - Cone Penetrometer
  - Light Induced Fluorescence



# RI Field Work – Phase 1



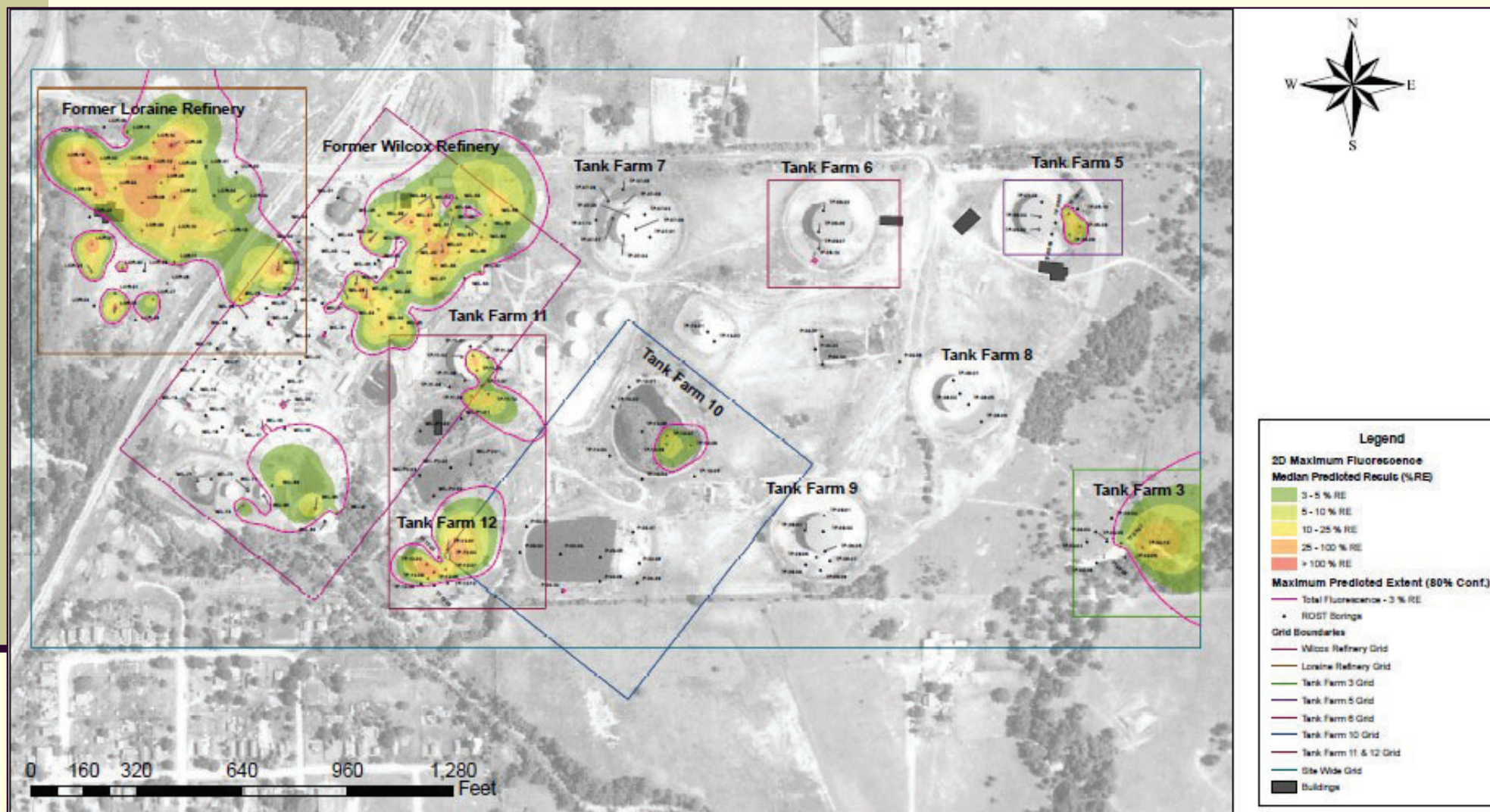
**Figure 10**  
Overburden Thickness Isopach Map  
Topography - CPT Refusal

**Wilcox Superfund Site**  
Bristow, Oklahoma

*S<sub>2</sub> C<sub>2</sub> inc.*



# RI Field Work – Phase 1

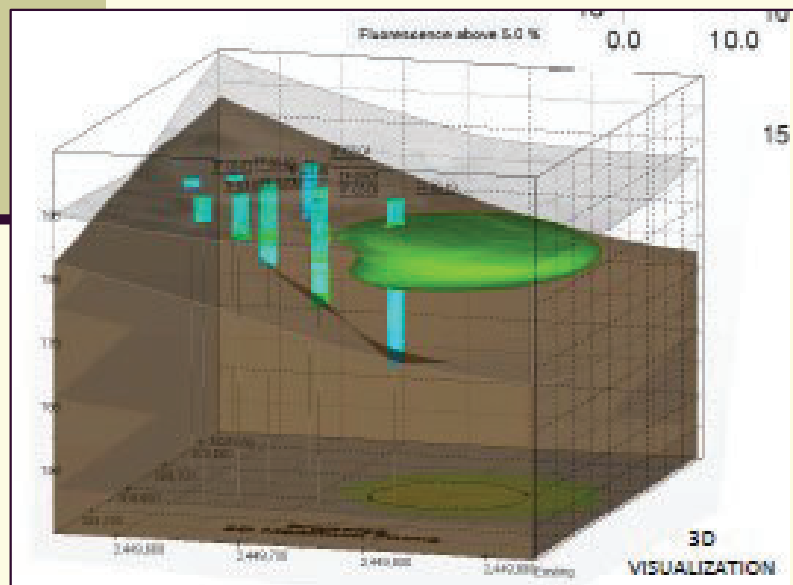
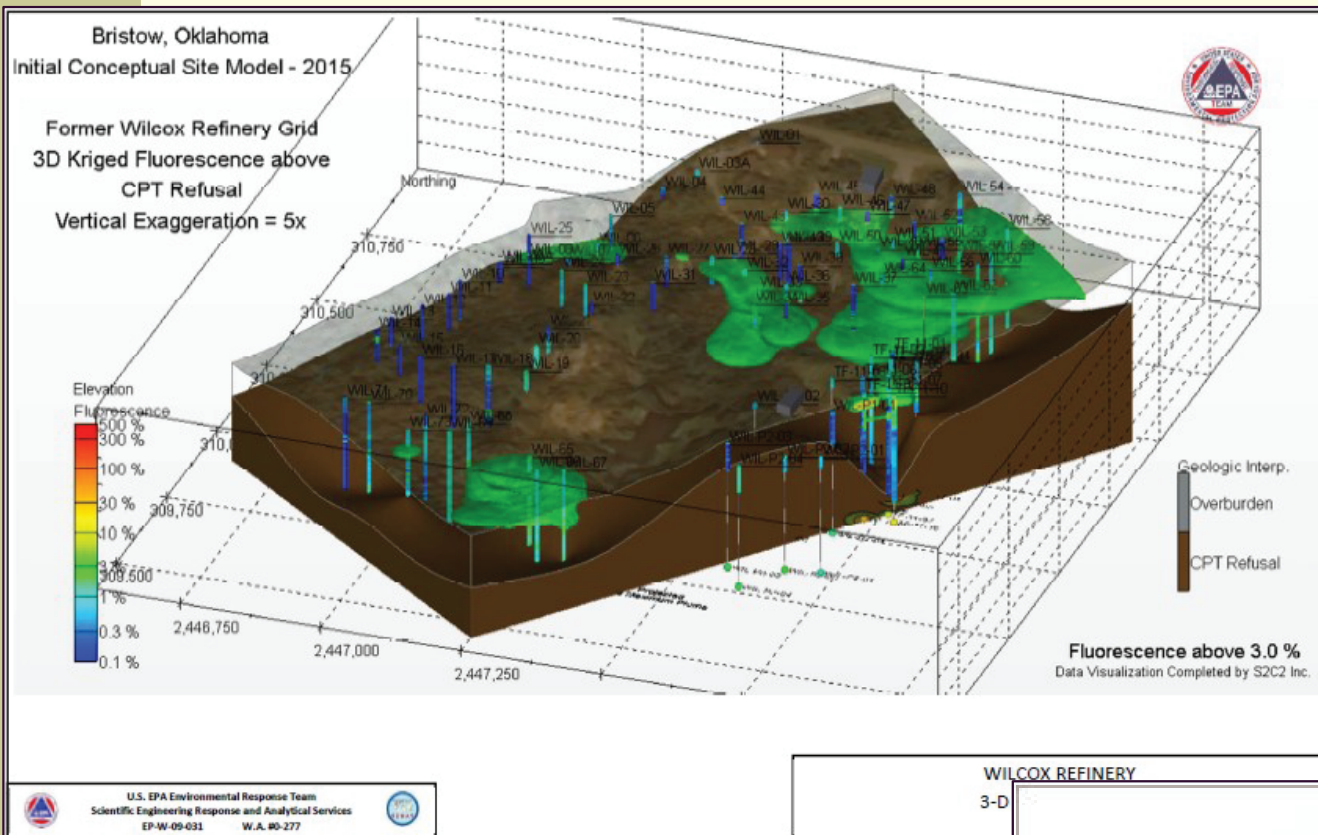


**Figure 11**  
**2D Maximum Total Fluorescence**  
**Site Wide**

**Wilcox Superfund Site**  
**Bristow, Oklahoma**

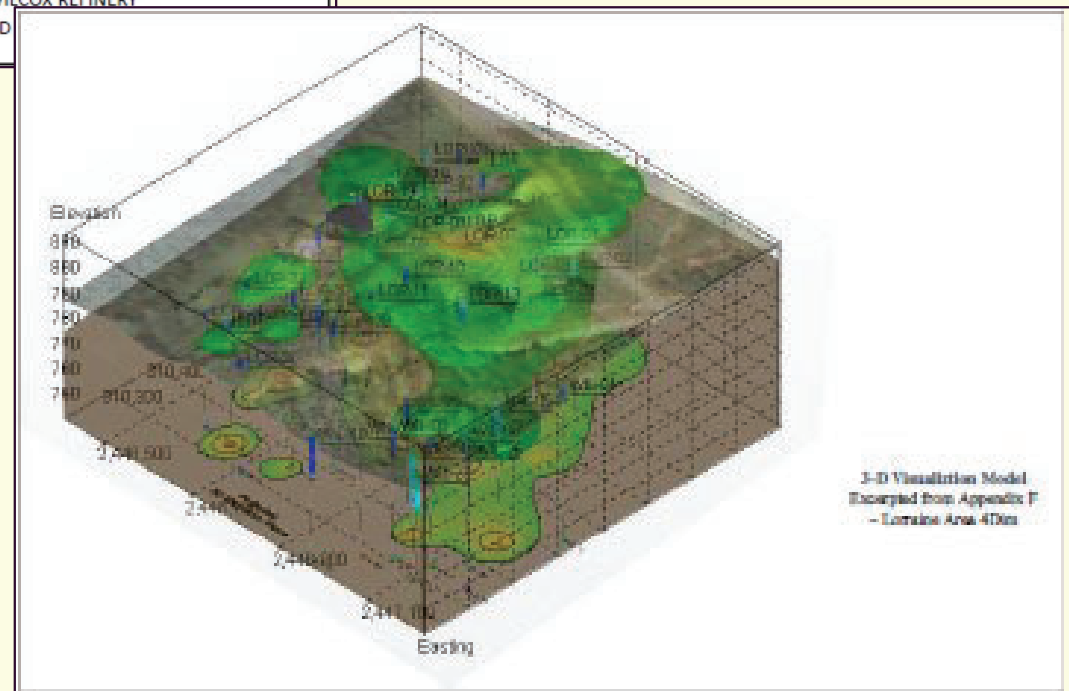
*S<sub>2</sub> C<sub>2</sub> inc.*

# RI Field Work – Phase 1



7-1-2016 DRAFT

WILCOX REFINERY  
3-D



Wilcox Oil Company Open House

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# RI Field Work - Phase 2 - Mobilization 1

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## ■ Site Work Plans

- Began Development - December 2015 - Based on Phase 1 Data
- Finalized Mobilization 1: July 2016

## ■ Site Field Work

- August/September 2016
- Ground Water, Soil, and Vapor Sampling
- Time permitting: surface water and sediment sampling







# RI Field Work - Phase 2 - Mobilization 1

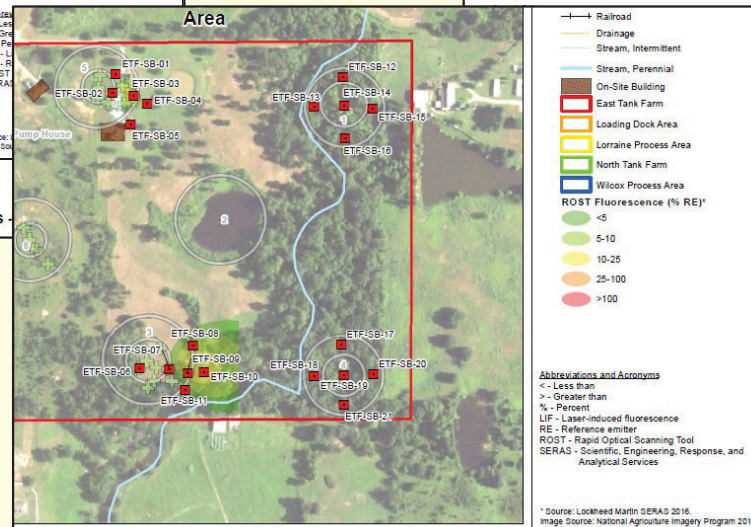
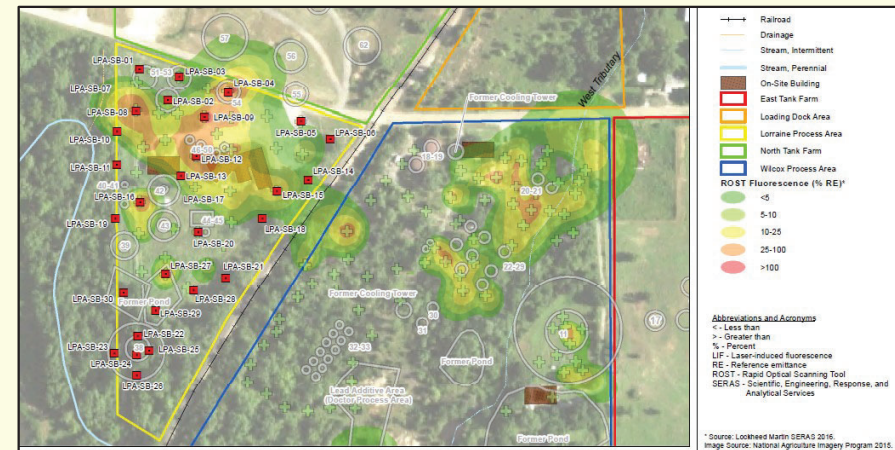
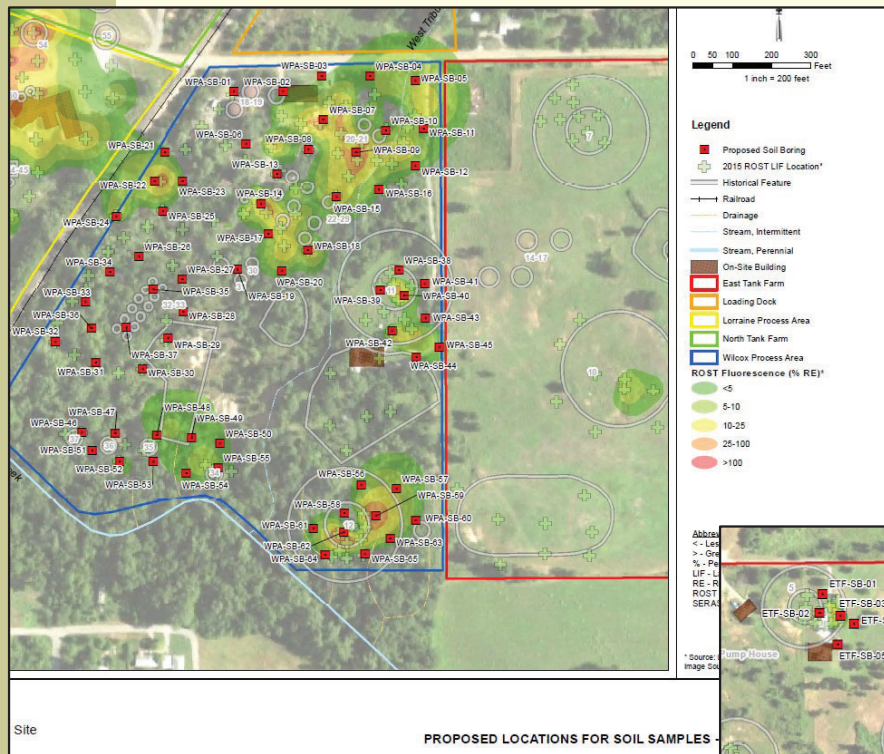


FIGURE 8  
PROPOSED LOCATIONS FOR SOIL SAMPLES - LORRAINE PROCESS AREA

Lorraine

Wilcox

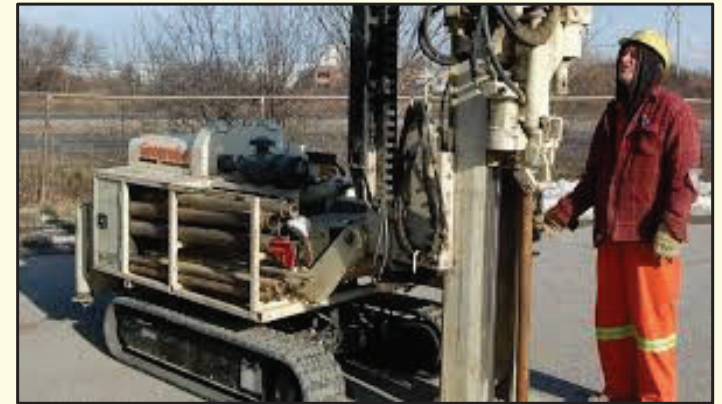
Soil

FIGURE 10  
PROPOSED LOCATIONS FOR EAST TANK FARM SOIL SAMPLES AND BACKGROUND AREA

East Tank Farm

# RI Field Work - Phase 2 - Mobilization 1

## Soil



Direct Push

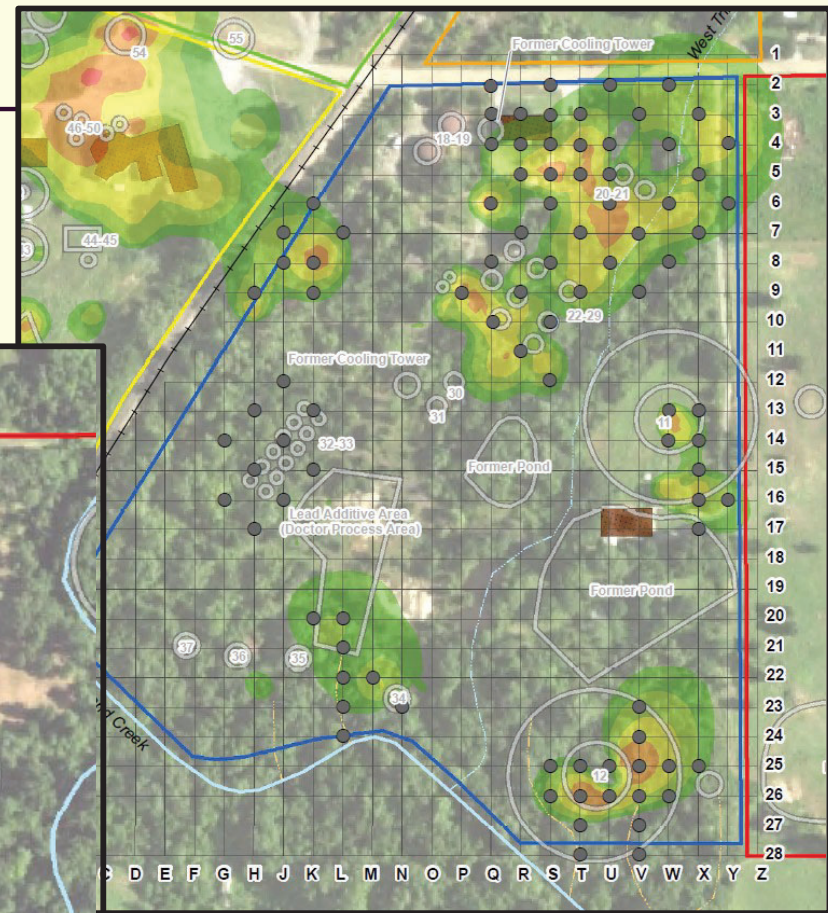




# RI Field Work - Phase 2 - Mobilization 1



Lorraine



Wilcox

Passive Gas

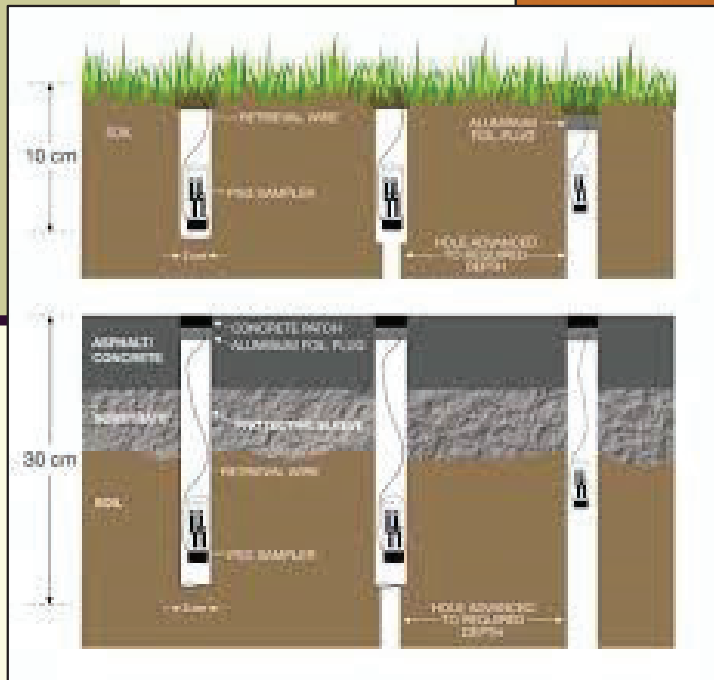
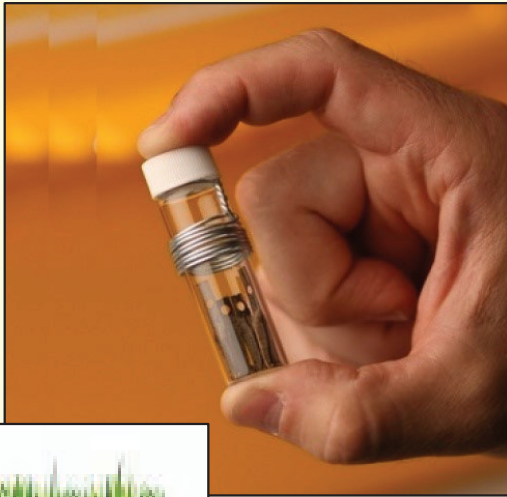


East Tank Farm



# RI Field Work - Phase 2 - Mobilization 1

## Passive Gas



7-1-2016 DRAFT

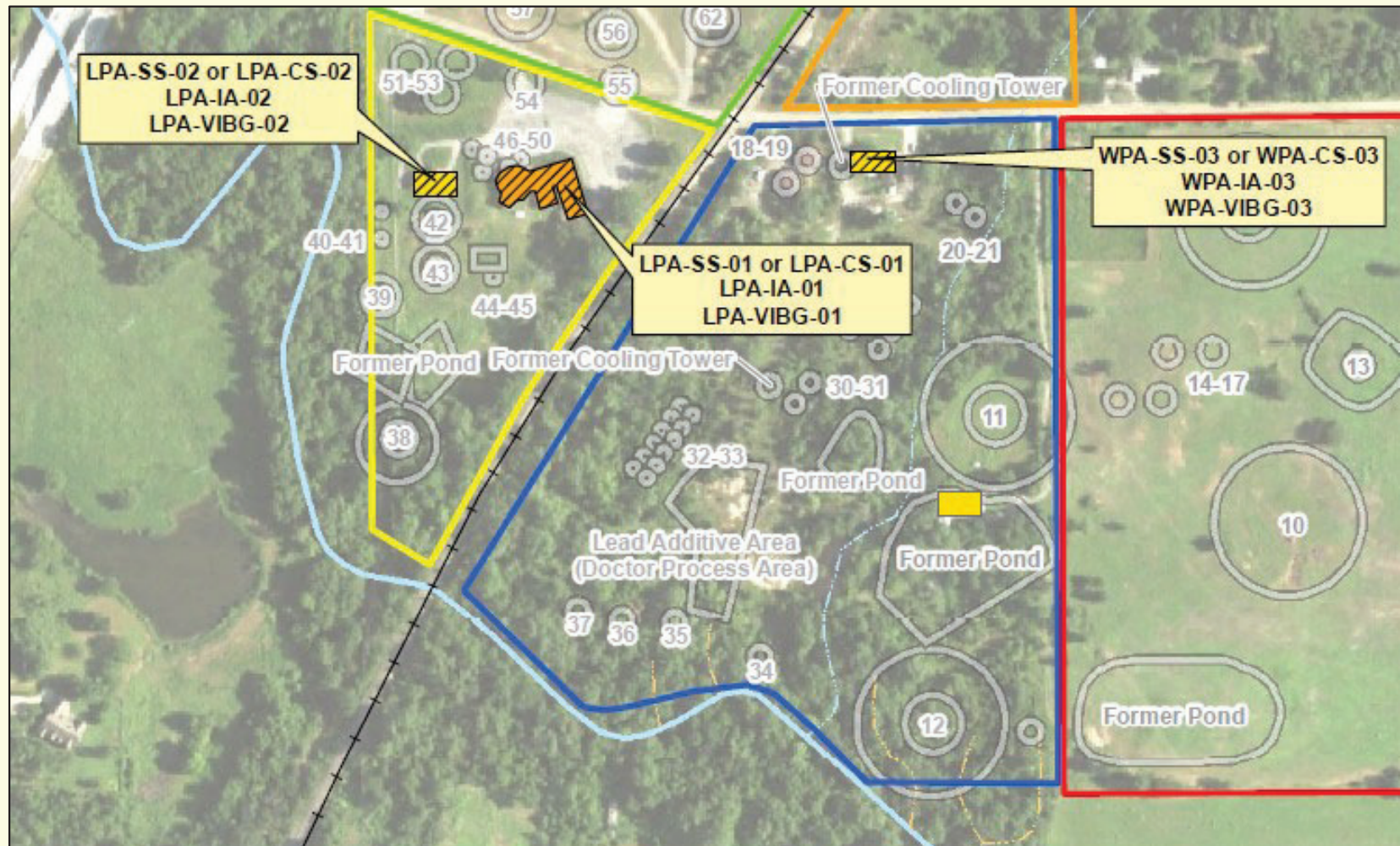
## Indoor Air



Wilcox Oil Company Open House



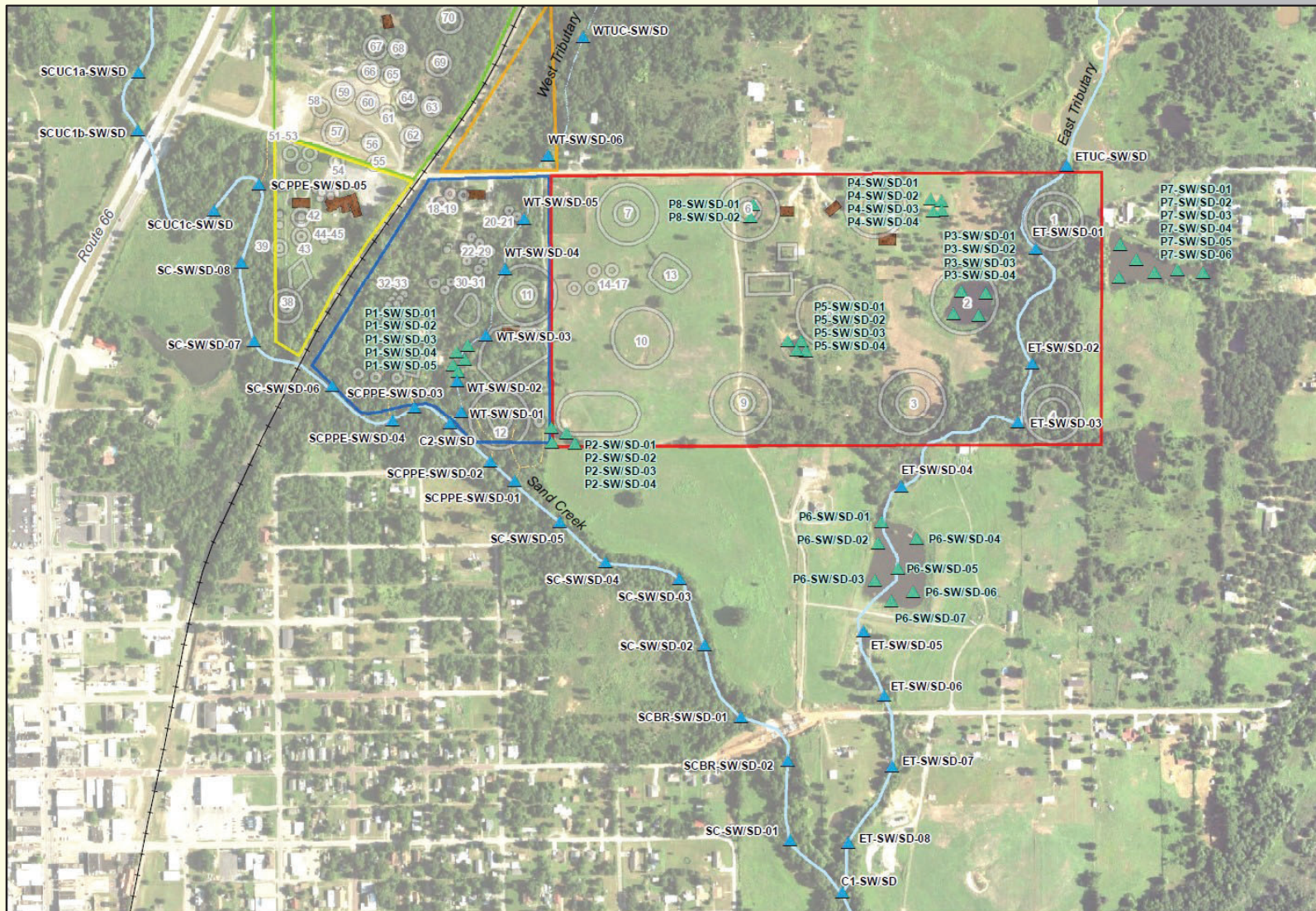
# RI Field Work - Phase 2 - Mobilization 1



Indoor  
Air



# RI Field Work - Phase 2 - Mobilization 1





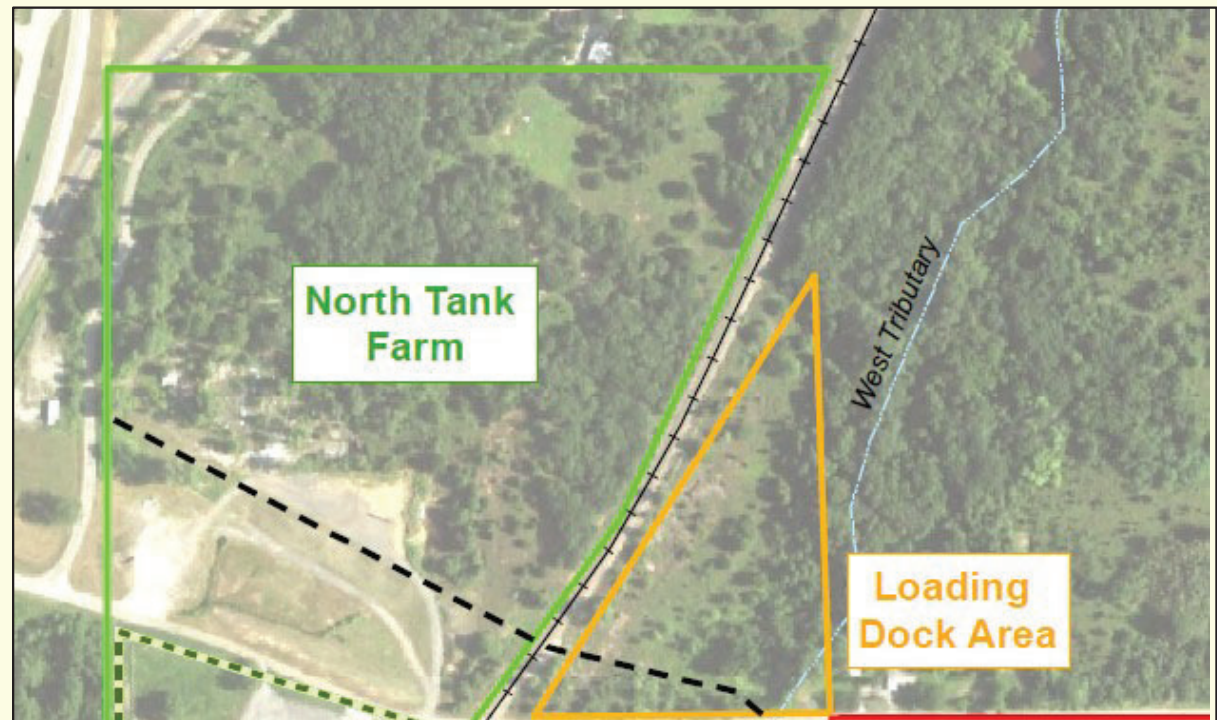
# RI Field Work - Phase 2 - Mobilization 1



Sediment and  
Surface Water

# RI Field Work - Phase 2 - Mobilization 2

- North Tank Farm
- Loading Dock
- Data Gaps from Mobilization 1
- Early 2017

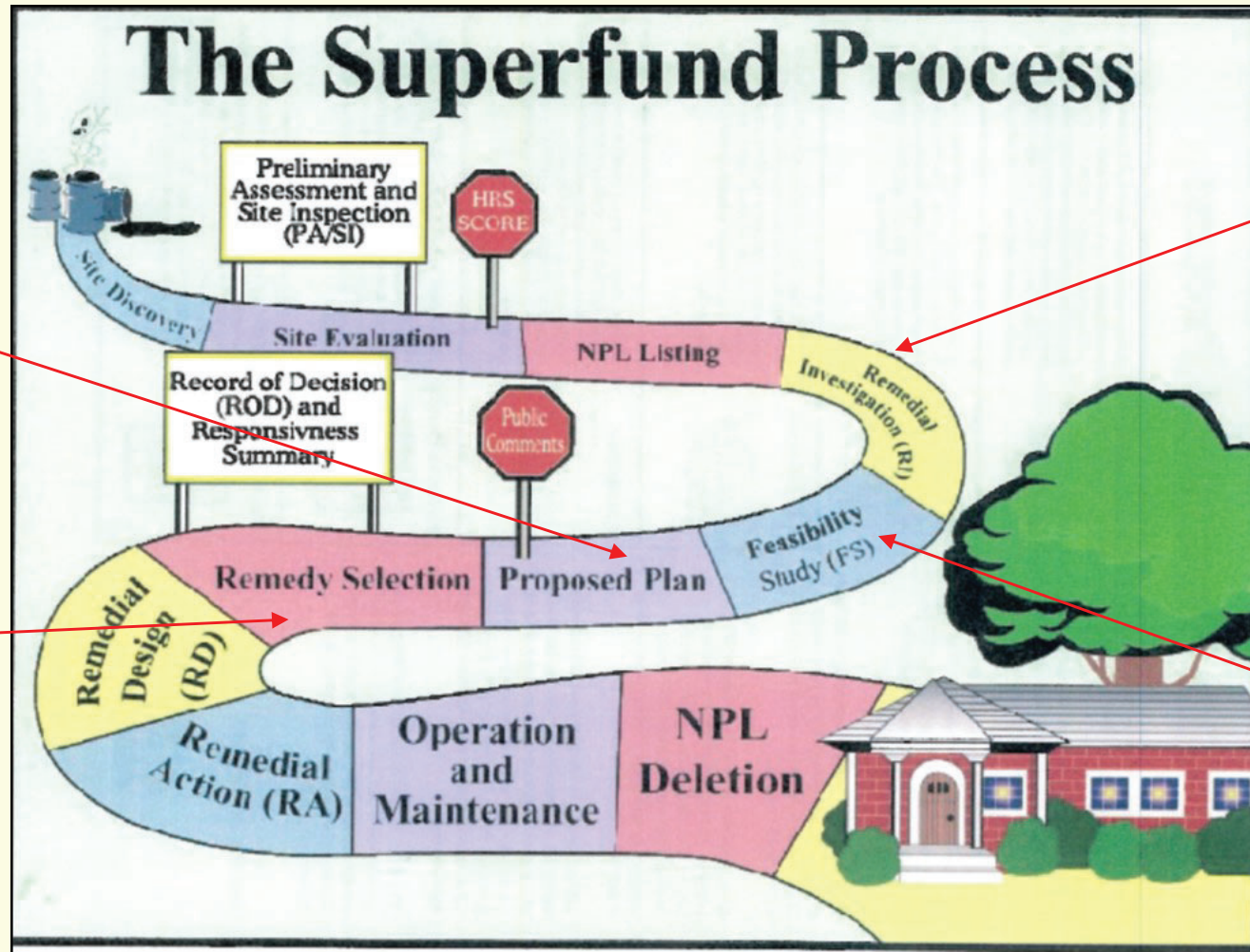




# Future Work

Proposed Plan to present the preferred clean up option to the public (2017)

Record of Decision to establish the Site clean up (2018)



We are Here.

Feasibility Report to summarize clean up options (2017)

# Community Participation

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- Site documents can be found at:
  - Bristow Public Library
  - Oklahoma Department of Environmental Quality
- Web Resources
  - ODEQ: [www.deq.state.ok.us/lpdnew/index.htm](http://www.deq.state.ok.us/lpdnew/index.htm)
  - U.S. EPA: <http://www.epa.gov/superfund/search-superfund-sites-where-you-live>
- Contacts
  - EPA, Project Manager: Katrina Higgins-Coltrain 214-665-8143
  - ODEQ, Project Manager: Todd Downham 405-702-5136
  - EPA, Community Involvement: Bill Little 214-665-8131
  - EPA toll-free number 800-533-5308